

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-28. (Canceled)

29. (Currently Amended) A method for the treatment of Syndrome X in a human subject in need thereof which comprises orally administering to the human subject a therapeutically effective amount of a xenobiotic fatty acid compound of the formula $R\text{-COOH}$ or a salt, ester or amide thereof, wherein R designates a saturated or unsaturated alkyl chain of 10-24 carbon atoms, one or more of which may be replaced by a heteroatom, wherein one or more of said carbon or heteroatom chain members optionally forms part of a ring, and wherein said chain is optionally substituted by a hydrocarbyl radical, heterocyclyl radical, or a lower alkoxy, hydroxyl-substituted lower alkyl, hydroxyl, carboxyl, halogen, phenyl, or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted phenyl $C_3\text{-}C_7$ cycloalkyl or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted $C_3\text{-}C_7$ cycloalkyl group wherein said compound is capable of being endogenously converted to its respective coenzyme A thioester, $RCOSCoA$, wherein Syndrome X comprises more than one of (1) dysliproteinemia, (2) obesity, (3) impaired glucose tolerance leading to noninsulin-dependent diabetes mellitus (NIDDM) (4) or essential hypertension ~~or (5) thrombogenic/fibrinolytic defects~~ and wherein the

administration of said xenobiotic fatty acid compound
increases ~~treatment is accompanied by an increase in~~
plasma levels of HDL cholesterol, so as to thereby
treat Syndrome X in the human subject.

30. (Previously presented) The method of claim 29, wherein R is selected from the group consisting of ω -carboxyl and ω -hydroxyl chains.
31. (Previously presented) The method of claim 29, wherein RCOOH is a saturated or non-saturated long chain fatty acid.
32. (Previously presented) The method of claim 29, wherein RCOOH is selected from the group consisting of:
 - 1,16 Hexadecanedioic acid;
 - 1,18 Octadecanedioic acid;
 - 2,2,15,15-tetramethyl-hexadecane-1,16-dioic acid;
 - 2,2,17,17-tetramethyl-octadecane-1,18-dioic acid;
 - 3,3,14,14-tetramethyl-hexadecane-1,16-dioic acid;
 - 3,3,16,16-tetramethyl-octadecane-1,18-dioic acid;
 - 4,4,13,13-tetramethyl-hexadecane-1,16-dioic acid; and
 - 4,4,15,15-tetramethyl-octadecane-1,18-dioic acid.
33. (Previously presented) The method of claim 29, wherein RCOOH is 3,3,14,14-tetramethyl-hexadecane-1,16-dioic acid.
34. (Withdrawn) The method of claim 29, wherein RCOOH is 3,3,16,16-tetramethyl-octadecane-1,18-dioic acid.
35. (Withdrawn-Previously presented) The method of claim 29, wherein RCOOH is selected from the group consisting of:

16-hydroxy-hexadecanoic acid;
18-hydroxy-octadecanoic acid;
16-hydroxy-2,2-dimethyl-hexadecanoic acid;
18-hydroxy-2,2-dimethyl-octadecanoic acid;
16-hydroxy-3,3-dimethyl-hexadecanoic acid;
18-hydroxy-3,3-dimethyl-octadecanoic acid;
16-hydroxy-4,4-dimethyl-hexadecanoic acid;and
18-hydroxy-4,4-dimethyl-octadecanoic acid.

36. (Currently amended) A method for the treatment of dyslipoproteinemia in a human subject which comprises orally administering to the human subject a therapeutically effective amount of a xenobiotic fatty acid compound of the formula R-COOH or a salt, ester or amide thereof, wherein R designates a saturated or unsaturated alkyl chain of 10-24 carbon atoms, one or more of which may be replaced by a heteroatom, wherein one or more of said carbon or heteroatom chain members optionally forms part of a ring, and wherein said chain is optionally substituted by a hydrocarbyl radical, heterocyclyl radical, or a lower alkoxy, hydroxyl-substituted lower alkyl, hydroxyl, carboxyl, halogen, phenyl, or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted phenyl C₃-C₇, cycloalkyl or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted C₃-C₇, cycloalkyl group wherein said compound is capable of being endogenously converted to its respective coenzyme A thioester, RCOSCoA, and wherein the administration of said xenobiotic fatty acid compound increases ~~treatment is accompanied by an increase in~~ plasma levels of HDL cholesterol, so as to thereby treat dyslipoproteinemia in the human subject.

37. (Previously presented) The method of claim 36, wherein R is selected from the group consisting of ω -carboxyl and ω -hydroxyl chains.
38. (Previously presented) The method of claim 36, wherein RCOOH is a saturated or non-saturated long chain fatty acid.
39. (Previously presented) The method of claim 36, wherein RCOOH is selected from the group consisting of:
1,16 Hexadecanedioic acid;
1,18 Octadecanedioic acid;
2,2,15,15-tetramethyl-hexadecane-1,16-dioic acid;
2,2,17,17-tetramethyl-octadecane-1,18-dioic acid;
3,3,14,14-tetramethyl-hexadecane-1,16-dioic acid;
3,3,16,16-tetramethyl-octadecane-1,18-dioic acid;
4,4,13,13-tetramethyl-hexadecane-1,16-dioic acid;and
4,4,15,15-tetramethyl-octadecane-1,18-dioic acid.
40. (Withdrawn) The method of claim 36, wherein RCOOH is 3,3,16,16-tetramethyl-octadecane-1,18-dioic acid.
41. (Withdrawn-Previously presented) The method of claim 36, wherein RCOOH is selected from the group consisting of:
16-hydroxy-hexadecanoic acid;
18-hydroxy-octadecanoic acid;
16-hydroxy-2,2-dimethyl-hexadecanoic acid;
18-hydroxy-2,2-dimethyl-octadecanoic acid;
16-hydroxy-3,3-dimethyl-hexadecanoic acid;
18-hydroxy-3,3-dimethyl-octadecanoic acid;
16-hydroxy-4,4-dimethyl-hexadecanoic acid;and
18-hydroxy-4,4-dimethyl-octadecanoic acid.

42. (Currently amended) A method for lowering plasma levels of triglycerides in a human subject which comprises orally administering to the human subject an effective triglyceride lowering amount of a xenobiotic fatty acid compound of the formula $R\text{-COOH}$ or a salt, ester or amide thereof, wherein R designates a saturated or unsaturated alkyl chain of 10-24 carbon atoms, one or more of which may be replaced by a heteroatom, wherein one or more of said carbon or heteroatom chain members optionally forms part of a ring, and wherein said chain is optionally substituted by a hydrocarbonyl radical, heterocyclyl radical, or a lower alkoxy, hydroxyl-substituted lower alkyl, hydroxyl, carboxyl, halogen, phenyl, or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted phenyl $C_3\text{-}C_7$ cycloalkyl or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted $C_3\text{-}C_7$ cycloalkyl group wherein said compound is capable of being endogenously converted to its respective coenzyme A thioester, $RCOSCoA$, and wherein the administration of said xenobiotic fatty acid compound increases lowering of plasma levels of triglycerides ~~is accompanied by an increase in~~ plasma levels of HDL cholesterol, so as to thereby lower plasma levels of triglycerides in the human subject.
43. (Cancelled)
44. (Previously presented) The method of claim 42, wherein R is selected from the group consisting of ω -carboxyl and ω -hydroxyl chains.
45. (Previously presented) The method of claim 42, wherein

RCOOH is a saturated or non-saturated long chain fatty acid.

46. (Previously presented) The method of claim 42, wherein RCOOH is selected from the group consisting of:
1,16 Hexadecanedioic acid;
1,18 Octadecanedioic acid;
2,2,15,15-tetramethyl-hexadecane-1,16-dioic acid;
2,2,17,17-tetramethyl-octadecane-1,18-dioic acid;
3,3,14,14-tetramethyl-hexadecane-1,16-dioic acid;
3,3,16,16-tetramethyl-octadecane-1,18-dioic acid;
4,4,13,13-tetramethyl-hexadecane-1,16-dioic acid; and
4,4,15,15-tetramethyl-octadecane-1,18-dioic acid.
47. (Withdrawn) The method of claim 42, wherein RCOOH is 3,3,16,16-tetramethyl-octadecane-1,18-dioic acid.
48. (Withdrawn-Previously presented) The method of claim 42, wherein RCOOH is selected from the group consisting of:
16-hydroxy-hexadecanoic acid;
18-hydroxy-octadecanoic acid;
16-hydroxy-2,2-dimethyl-hexadecanoic acid;
18-hydroxy-2,2-dimethyl-octadecanoic acid;
16-hydroxy-3,3-dimethyl-hexadecanoic acid;
18-hydroxy-3,3-dimethyl-octadecanoic acid;
16-hydroxy-4,4-dimethyl-hexadecanoic acid; and
18-hydroxy-4,4-dimethyl-octadecanoic acid.
49. (Previously presented) A method for increasing plasma levels of HDL cholesterol in a human subject which comprises orally administering to the human subject an effective HDL cholesterol increasing amount of a xenobiotic fatty acid compound of the formula R-COOH

or a salt, ester or amide thereof, wherein R designates a saturated or unsaturated alkyl chain of 10-24 carbon atoms, one or more of which may be replaced by a heteroatom, wherein one or more of said carbon or heteroatom chain members optionally forms part of a ring, and wherein said chain is optionally substituted by a hydrocarbyl radical, heterocyclyl radical, or a lower alkoxy, hydroxyl-substituted lower alkyl, hydroxyl, carboxyl, halogen, phenyl, or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted phenyl C₃-C₇ cycloalkyl or (hydroxyl-, lower alkyl, lower alkoxy, lower alkenyl or lower alkynyl)-substituted C₃-C₇ cycloalkyl group, and wherein said compound is capable of being endogenously converted to its respective coenzyme A thioester, RCOSCoA, so as to thereby increase plasma levels of HDL cholesterol in the human subject.

50. (Previously presented) The method of claim 49, wherein R is selected from the group consisting of ω -carboxyl and ω -hydroxyl chains.
51. (Previously presented) The method of claim 49, wherein RCOOH is a saturated or non-saturated long chain fatty acid.
52. (Previously presented) The method of claim 49, wherein RCOOH is selected from the group consisting of:
 - 1,16 Hexadecanedioic acid;
 - 1,18 Octadecanedioic acid;
 - 2,2,15,15-tetramethyl-hexadecane-1,16-dioic acid;
 - 2,2,17,17-tetramethyl-octadecane-1,18-dioic acid;
 - 3,3,14,14-tetramethyl-hexadecane-1,16-dioic acid;
 - 3,3,16,16-tetramethyl-octadecane-1,18-dioic acid;and

4,4,13,13-tetramethyl-hexadecane-1,16-dioic acid
4,4,15,15-tetramethyl-octadecane-1,18-dioic acid.

53. (Withdrawn) The method of claim 49, wherein RCOOH is
3,3,16,16-tetramethyl-octadecane-1,18-dioic acid.

54. (Withdrawn-Previously presented) The method of claim
49, wherein RCOOH is selected from the group
consisting of:

16-hydroxy-hexadecanoic acid;
18-hydroxy-octadecanoic acid;
16-hydroxy-2,2-dimethyl-hexadecanoic acid;
18-hydroxy-2,2-dimethyl-octadecanoic acid;
16-hydroxy-3,3-dimethyl-hexadecanoic acid;
18-hydroxy-3,3-dimethyl-octadecanoic acid;
16-hydroxy-4,4-dimethyl-hexadecanoic acid;and
18-hydroxy-4,4-dimethyl-octadecanoic acid.